

MODULATED LASER WITH INTEGRAL PRE-DISTORTION CIRCUIT

Abstract

An integrated laser device includes a pre-distortion circuit. The pre-distortion circuit receives an electrical modulation signal and generates a pre-distorted modulation signal. A laser is integral with the pre-distortion circuit. The laser includes an electrical modulation input that is connected to the output of the pre-distortion circuit. The laser modulates an optical signal with the pre-distorted modulation signal. The pre-distorted modulation signal causes at least some vector cancellation of distortion signals generated when the laser modulates the optical signal.